

Form PTO-1449
(REV. 8-83)

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket:
2003080-0054
(SK-893-US)

In re Application No.
09/641,742

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT**

(Use several sheets if necessary)

Applicant: Danishefsky *et al.*

Filing Date:
August 18, 2000

Group:
1642

U. S. PATENT DOCUMENTS

Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass
KAC	5,683,674	Taylor-Papadimitriou <i>et al.</i>	Nov. 4, 1997	424	1.49
KAC	6,222,020	Taylor-Papadimitriou <i>et al.</i>	April 24, 2001	530	395

U.S. PATENT APPLICATIONS

Examiner's Initials	Serial No.	Applicant	Filing Date		

FOREIGN PATENT DOCUMENTS

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				Yes	No

**OTHER DOCUMENTS
(Including Author, Title, Date, Pertinent Pages, Etc.)**

KAC	Zhang <i>et al.</i> , "Immune Sera and Monoclonal Antibodies Define Two Configurations for the Sialyl Tn Tumor Antigen", <i>Cancer Res.</i> 1995, 55, 3364-3368.
KAC	Toyokuni <i>et al.</i> , "Synthetic Carbohydrate Vaccines: Synthesis and Immunogenicity of Tn Antigen Conjugates", <i>Bioorg. Med. Chem.</i> 1994, 2, 1119-1132


EXAMINER

Norm J. Gamella

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10/3/05

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Form PTO-1449 (REV. 8-03)		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket 2003080-0054 (SK-893-US)		In re Application No. 09/641,742	
		INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)					
		Applicant: Danishefsky <i>et al.</i>					
		Filing Date: August 18, 2000				Group: 1642	

U.S. PATENT DOCUMENTS					
Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Sub class

U.S. PATENT APPLICATIONS					
Examiner's Initials:	Serial Number:	Applicant:	Filing Date:	Group:	Art Unit:

FOREIGN PATENT DOCUMENTS					
Examiner's Initials	Document No.	Country	International Publication Date	Translation	
				Yes	No
KAC	WO 97/03995	WIPO	February 6, 1997		
KAC	WO 98/46246	WIPO	October 22, 1998		

OTHER DOCUMENTS					
Examiner's Initials	Citation (Including Author, Title, Date, Pertinent Pages, Etc.)				
KAC	Broddefalk <i>et al.</i> , "Preparation of a Glycopeptide Analogue of Type II Collagen – Use of Acid Labile Protective Groups for Carbohydrate Moieties in Solid Phase Synthesis of O-Linked Glycopeptides," <i>Tetrahedron Letters</i> , 37(17), 3011-3014, 1996.				
↓	Chen <i>et al.</i> , "Exploration of Modalities in Building a α-O-Linked Systems Through Glycal Assembly: A Total Synthesis of the Mucin-Related F1a Antigen" <i>J. Am. Chem. Soc.</i> , 120, 7760-7769, 1998.				
↓	Kudryashov <i>et al.</i> "Immunogenicity of Synthetic Conjugates of Lewis ^x Oligosaccharide with Proteins in Mice: Towards the Design of Anticancer Vaccines," <i>Cancer Immunol Immunother.</i> , 45, 281-286, 1998.				

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RAC

Kuduk *et al.*, "Synthetic and Immunological Studies on Clustered Modes of Mucin-Related Tn and TF O-Linked Antigens: The Preparation of a Glycopeptide-Based Vaccine for Clinical Trials against Prostate Cancer," *J. Am. Chem. Soc.*, **120**, 12474-12485, 1998.

Liu *et al.*, "Structurally Defined Synthetic Cancer Vaccines: Analysis of Structure, Glycosylation and Recognition of cancer Associated Mucin, MUC-1 Derived Peptides," *Glycoconjugate Journal*, **12**, 607-617. [1995]

Paulsen *et al.*, "Synthesis of the Glycosyl Amino Acids.....," *Carbohydrate Research*, **268**, 17-34, 1995

Qiu *et al.*, "Mucin Type Glycopeptides: Synthesis of Core 2, Core 6 and F1- α Building Blocks and Unexpected Reactions," *Tetrahedron Letters*, **38**(1), 45-48, 1997.

Sames *et al.*, "Convergent Total Synthesis of a Tumor-Associated Mucin Motif," *Nature*, **389**, 587-591, 1997.

Toyokuni *et al.*, "Synthetic Vaccines: Synthesis of a Dimeric Tn Antigen-Lipopeptide Conjugate that Elicits Immune Responses Against Tn-Expressing Glycoproteins," *J. Am. Chem. Soc.*, **116**, 395-396, 1994.

Zhang, *et al.*, "Selection of Tumor Agents as Targets for Immune Attack Using Immunohistochemistry: II. Blood Group Related Antigens," *Int. J. Cancer*, **73**, 50-56, 1997.

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U.S. PATENT DOCUMENTS							
Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass		
KAC	6,090,789	Danishefsky <i>et al.</i>	July 18, 2000	514	25		
KAC	US RE38,046 E	Longenecker <i>et al.</i>	March 25, 2003	424	279.1		
U.S. PATENT PUBLICATIONS							
Examiner's Initials:	Publication Number:	Applicant:	Publication Date:	Class	Subclass		
KAC	US 2002/0006900	Danishefsky <i>et al.</i>	January 17, 2002	514	8		
KAC	US 2002/0038017	Danishefsky <i>et al.</i>	March 28, 2002	536	53		
FOREIGN PATENT DOCUMENTS							
Examiner's Initials	Document No.	Country	International Publication Date	Translation			
				Yes	No		
KAC	WO 99/15201	PCT	April 1, 1999				
	WO 01/14395 A2	PCT	March 1, 2001				
✓	WO 01/14395 A3	PCT	March 1, 2001				
OTHER DOCUMENTS							
Examiner's Initials	Citation (Including Author, Title, Date, Pertinent Pages, Etc.)						
KAC	Allen <i>et al.</i> , "Pursuit of optimal carbohydrate-based anticancer vaccines: preparation of a multiantigenic unimolecular glycopeptide containing the Tn, MBr1, and Lewis ^x antigens", <i>J. Am. Chem. Soc.</i> , 123 :1890-1897, 2001.						
	Allen <i>et al.</i> , "A second generation synthesis of the MBr1 (Globo-H) breast tumor antigen: new application of the n-pentenyl glycoside method for achieving complex carbohydrate protein linkages", <i>Chem. Eur. J.</i> , 6 (8):1366-1375, 2000.						
	Biswas <i>et al.</i> , "Construction of carbohydrate-based antitumor vaccines: synthesis of glycosyl amino acids by olefin cross-metathesis", <i>Tetrahedron Letters</i> , 43 :6107-6110, 2002.						
	Blackwell <i>et al.</i> , "New approaches to olefin cross-metathesis", <i>J. Am. Chem. Soc.</i> , 122 :58-71, 2000.						
✓	Bosse <i>et al.</i> , "Linear synthesis of the tumor-associated carbohydrate antigens Globo-H, SSEA-3, and Gb3", <i>J. Org. Chem.</i> , 67 :6659-6670, 2002.						



PCT/US/03/22657
(REV. 8-83)

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KAC

Keding *et al.*, "Hydroxynorleucine as a glycosyl acceptor is an efficient means for introducing amino acid functionality into complex carbohydrates", *Tetrahedron Letters*, **44**:3413-3416, 2003.

Kim *et al.*, "Effect of immunological adjuvant combinations on the antibody and T-cell response to vaccination with MUC1-KLH and GD3-KLH conjugates", *Vaccine*, **19**:530-537, 2001.

Kudryashov *et al.*, "Toward optimized carbohydrate-based anticancer vaccines: Epitope clustering, carrier structure, and adjuvant all influence antibody responses to lewis^x conjugates in mice", *Proc. Natl. Acad. Sci. USA*, **98**:3264-3269, 2001.

Nicolaou *et al.*, "A practical and enantioselective synthesis of glycosphingolipids and related compounds. Total synthesis of Globotriasosylceramide (Gb₃)", *J. Am. Chem. Soc.*, **110**:7910-7912, 1988.

Ragupathi *et al.*, "A Fully synthetic Globo H carbohydrate vaccine induces a focused humoral response in prostate cancer patients: a proof of principle", *Angew. Chem. Int. Ed.*, **38**(4):563-566, 1999.

Ragupathi *et al.*, "On the power of chemical synthesis: Immunological evaluation of models for multiantigenic carbohydrate-based cancer vaccines", *Proc. Natl. Acad. Sci. USA*, **99**(21):13699-13704, 2002.

Slovin *et al.*, "Carbohydrate vaccines in cancer: Immunogenicity of a fully Globo H hexasaccharide conjugate in man", *Proc. Natl. Acad. Sci. USA*, **96**:5710-5715, 1999.

Williams *et al.*, "In pursuit of an anticancer vaccine: a monomolecular construct containing multiple carbohydrate antigens", *Tetrahedron Letters*, **41**:9505-9508, 2000.

Database BIOSIS'Online! Biosciences Information Service, Philadelphia, PA, US; 22 March 2002, Kovbasnjuk Olga *et al.*, "Glycosphingolipid Gb₃ as biomarker for invasive colon carcinoma cells", *FASEB Journal*, **16**(5):A1200, 2002, Annual Meeting of Professional Research Scientists on Experimental Biology, New Orleans, LA, USA, April 20-24, 2002.

International Search Report issued for PCT application PCT/US03/22657

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<i>KAC</i>	Toyokuni <i>et al.</i> , "Synthetic Carbohydrate Vaccines: Synthesis and Immunogenicity of Tn Antigen Conjugates", <i>Bioorg. Med. Chem.</i> 1994, 2, 1119-1132

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Karen J. Daniels

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U. S. PATENT DOCUMENTS

Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass
KAC	5,053,489	Kufe <i>et al.</i>	10/1/91	530	350
	5,625,030	Williams <i>et al.</i>	4/29/97	528	361
	5,798,090	Longnecker <i>et al.</i>	8/25/98	424	279.1
	5,858,994	Kretzschmar <i>et al.</i>	01/12/99	514	62
	5,807,559	Jondal <i>et al.</i>	9/15/98	424	278.1
	5,871,990	Clausen <i>et al.</i>	2/16/99	435	193
	6,013,779	Wong <i>et al.</i>	1/11/00	536	18.6
✓	6,238,668	Danishefsky <i>et al.</i>	5/29/01	424	184.1

U.S. PATENT APPLICATIONS

Examiner's Initials	Serial No.	Applicant	Filing Date		
KAC	* 08/457,485	Taylor-Papadimitriou <i>et al.</i>	June 1, 1995		

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Karm G. Camella

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FOREIGN PATENT DOCUMENTS

Examiner's Initials	Document No.	Country	Date	Translation	
				Yes	No
KAC	EP 341252	EP	11/19/97		
KAC	WO 01/14395	PCT	03/01/01		

Examiner's
Initials

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

KAC	Bilodeau M.T., "Total Synthesis of a Human Breast Tumor Associated Antigen", <i>J. Am. Chem. Soc.</i> , 117:7840-7841, 1995.
	Boehm T. <i>et al.</i> , "Development of a Novel Silyl Ether Linker for Solid-Phase Organic Synthesis" <i>J. Org. Chem.</i> , 61:6498-6499, 1996.
	Danishefsky <i>et al.</i> "From the Laboratory to the Clinic: A Retrospective on Fully Synthetic Carbohydrate-Based Anticancer Vaccines" <i>Angew. Chem. Int. Ed. Engl.</i> , 39:836-863, 2000.
	Lay L. <i>et al.</i> , "Oligosaccharides Related to Tumor-Associated Antigens", <i>Helv. Chim. Acta</i> , 77:509-514, 1994.
	Randolph J.T. <i>et al.</i> , "An Interactive Strategy for the Assembly of Complex, Branched Oligosaccharide Domains on a Solid Support: A Concise Synthesis of the Lewis ^b Domain in Bioconjugatable Form", <i>Angew. Chem. Int. Ed. Engl.</i> , 33(14):1470-1473, 1994.
✓	* Yura <i>et al.</i> , "Preparation of oligosaccharide-linked polystyrene and method for immobilization of lectin and base materials for cells", abstract, Jpn. Kokai Tokkyo Koho (Japan), 03 December 1996.

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Karen A. Gault

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* Cited document is not at present available to the undersigned, or is available in the file of a prior related application relied upon for an earlier filing date under 35 U.S.C. § 120.